Response to Comments

Camarillo Sanitary District
Camarillo Water Reclamation Plant
Tentative Amended NPDES Permit

This Table describes all significant comments received from interested persons with regard to the above-mentioned tentative permit. Each comment has a corresponding response and action taken.

Commenter	#	Comment	Response	Action Taken
Comments received from Camarillo Sanitary District on June 1, 2015				
Camarillo Sanitary District (Camarillo SD)	C-1	For the provisions of the Permits that were not amended, the Permittees submitted comments and filed petitions for review on the previous permits.	Comment noted, however, the instructions in the letter transmitting the Tentative Amendment Order clearly informed the public that "the Board will accept comments only with respect to the proposed changes to the tentative amended requirements in underline and strikeout format." In addition, Finding J of the Fact Sheet on page F-5 explains the reason for the permit amendment, as follows: "On May 8, 2014, the Regional Water Board adopted Order No. R4-2014-0062 for the Camarillo WRP, which included chronic toxicity requirements using a two-concentration test design, based upon USEPA's Alternative Test Procedure (ATP) approval letter dated March 17, 2014. However, on February 11, 2015, USEPA withdrew its ATP approval. On April 9, 2015, the Regional Water Board adopted NPDES permits for the Joint Outfall System San Jose Creek WRP and other POTWs with revised chronic toxicity requirements consistent with the USEPA ATP withdrawal letter. Order R4-2014-0062 is being amended to update the chronic toxicity requirements, consistent with those included in the San Jose Creek WRP permit, and to correct other reporting requirements. All other permit requirements will remain unchanged and in effect." As such, only those comments pertaining to language that appears in underline and strikeout format will be accepted in the	None necessary.

Commenter	#	Comment	Response	Action Taken
			context of this narrow NPDES permit amendment.	
Camarillo SD	C-2	The comments and issues raised on appeal, including those challenging the numeric and maximum daily limits for chronic toxicity, remain valid and are incorporated by reference into this comment letter.	Please see response to Comment 1.	None necessary.
Camarillo SD	C-3	In addition, the arguments raised by the County Sanitation Districts of Los Angeles County in both their comment letters and petitions for review on the Pomona, Whittier Narrows, and San Jose Creek NPDES permits are also incorporated by reference herein.	Please see response to Comment 1.	None necessary.
Camarillo SD	C-4	**<u>The Regional Board Failed to Adequately Demonstrate Reasonable Potential.</u>** The proposed amendments include new language in footnote 15 for Thousand Oaks and Camarillo, and footnote 7 for Simi Valley, and in the Fact Sheets, which states: "a numeric WQBEL is established because the effluent data showed that there is reasonable potential for the effluent to cause or contribute to an exceedance of the water quality objective." The proposed permit amendments contain no effluent data to support these findings and chronic toxicity is not included in the Tables contained in the Fact Sheets that provide the summary of the reasonable potential analyses. For this reason, the effluent limitations for chronic toxicity are not necessary or justified and must be removed. Reasonable potential also cannot just be presumed where there is a TMDL. The steps set out in 40 C.F.R. §122.44(d) must still be followed to determine if reasonable potential exists before a Waste Load Allocation must be applied consistently in an effluent limitation. 40 C.F.R. §122.44(d)(1)(vii)("When developing water quality based effluent limits under this paragraph the permitting authority shall ensure that: (B) effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions	Even though the chronic toxicity final effluent limitation is not being modified as part of this amendment, staff felt the need to address the Permittee's allegation. The rationale used to determine that there was reasonable potential for the Facility to cause or contribute to an exceedance of the water quality objective for toxicity, in addition to justification of the final effluent limitations, is found in, but not limited to, section IV.C.4.b.iii of the Fact sheet and in the documents in the record, such as self-monitoring reports (SMRs) submitted by the Permittee under penalty of perjury. Those SMRs showed that the Camarillo WRP effluent exceeded 1 TUc on three separate occasions. The History of Toxicity Exceedances was presented by staff, as Slide 7 of the combined Power point presentation for items 10.1, 11.1 and 12.1, during the May 8, 2014 Board meeting, where the Los Angeles Board adopted the current NPDES permit, Order No. R4-2014-0062 for the Camarillo WRP. Moreover, Resolution No. R4-2005-009, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Toxicity, Chlorpyrifos, and Diazinon in Calleguas Creek, its Tributaries, and Mugu Lagoon (Toxicity TMDL),* assigns a chronic toxicity waste load allocation to the Camarillo WRP Facility. Therefore, a water quality-based final effluent limitation for chronic toxicity is required in the NPDES permit for the Camarillo WRP.	None necessary.

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		and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.") "The requirements of paragraphs (iii), (iv), (v) or (vi) apply ***after*** the permitting authority has determined that water quality based effluent limits are necessary under paragraph (ii)." 54 Fed. Reg. 23868, at 23873 and 23878 (emphasis added). "If the permitting authority, after applying the principles in paragraph (ii), determines that a pollutant or pollutant parameter is exceeding or is expected to exceed a water quality criterion, then the permitting authority uses one or more of paragraphs (iii), (iv), (v) or (vi) to determine the appropriate controls for the pollutant or pollutant parameter." *Id.* "[T]he permitting authority must satisfy the procedures in paragraph (ii) before establishing limits under paragraph (d)(1) (iii), (iv), (v) or (vi)." *Id.*		
Camarillo SD	C-5	**The Regional Board Cannot Rely on the Toxicity TMDL to Demonstrate Reasonable Potential or Justify Limits.** The Simi Valley permit contains the following addition in footnote 7: "The Calleguas Creek Watershed Toxicity TMDL includes a WLA of 1.0 TUc for toxicity, which is required to be implemented in accordance with USEPA, State Water Board, and Regional Water Board resolutions, guidance and policy at the time of permit issuance or renewal. … Consistent with the Toxicity TMDL Implementation Plan, these chronic toxicity WLA-based final effluent limitations will be implemented using the Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (U.S. EPA 2002, EPA-821-R-02-013), and current USEPA guidance in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June /2010) and EPA Regions 8, 9 and 10 Toxicity Training Tool (January	This comment is not relevant to the Camarillo WRP because the language in question was adopted into the NPDES permit in May 2014 and is not one of the sections that was public noticed for the amendment.	None necessary.

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		2010), http://www2.epa.gov/region8/epa-regions-8-9-and-10-toxicity-training-tool-january-2010." The two USEPA guidance documents referenced do not mandate the inclusion of a numeric effluent limitation for chronic toxicity: • National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, June 2010) (2010 TST Guidance), and • EPA Regions 8, 9 and 10 Toxicity Training Tool (January 2010) (Training Tool), http://cfpub.epa.gov/npdes/wqbasedpermitting/wet.cfm.		
Camarillo SD	C-6	**<u>The Proposed Amendments Are Inconsistent with the Toxicity TMDL</u>** The amendments related to the Toxicity TMDL focus only on the ability to use "guidance" and ignore the language of the Basin Plan Amendment incorporating that TMDL, which expressly states that the "WLAs would be <u>implemented as a trigger</u> for initiation of the TRE/TIE process as outlined in EPA's 'Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program' (2000) and current NPDES permits held by dischargers to the CCW." See Exhibit G, Resolution No. R4-2005-009 at pg. 7 (Implementation Plan), and Exhibit H, excerpts of the CCW Toxicity, Chlorpyrifos and Diazinon TMDL Technical Report (April 25, 2005) at pg. 122 (emphasis added). The adopted and applicable resolutions and precedential policies at the time of these proposed permit amendments all mandate narrative effluent limitations for chronic toxicity and a trigger for initiation of the TRE/TIE process. State Water Board Order Nos. WQO 2003-0012, WQO 2003-0013, WQO 2008-0008 at pp. 5-7 (concluding that numeric effluent limitations for chronic toxicity are not appropriate at this time), and WQO 2012-0001.	Consistent with the public notice that was distributed for this item, the issue about whether the chronic toxicity final effluent limit should be numeric or a trigger will not be considered at the July 9, 2015 Board hearing, since that is outside of the scope of the proposed NPDES permit amendment. Moreover, this issue was addressed on April 30, 2014 in response to Camarillo SD's comment letter dated April 14, 2014, Comment C5 on page 7 of 52 in the Response to Comments Table prepared by Water Board staff and included in the Board agenda package for the adoption of NPDES Order No. R4-2014-0062 for the Camarillo WRP.	None necessary.

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Camarillo SD	C-7	In fact, the most recent guidance from EPA is withdrawing its approval of an Alternate Test Procedure ("ATP") providing regulatory approval to use the TST. In EPA's March 17, 2014 TST ATP, EPA had "determined that the State Water Board's proposed use of the two-concentration toxicity test evaluated using the Test of Significant Toxicity (TST) is an acceptable equivalent under the ATP process to the five-concentration test evaluated using NOEC-LOEC hypothesis testing recommended in 40 CFR Part 136.5." However, on February 11, 2015, EPA withdrew the approval of this Limited Use ATP, effective immediately. So the TST is no longer able to be used in a regulatory context and is not consistent with the TUc/NOEC approach used in the Toxicity TMDL, and the promulgated Part 136 methods.	The Camarillo WRP Order is consistent with the letter dated February 11, 2015, from USEPA to the State Water Resources Control Board (State Water Board) withdrawing approval of the alternate test procedure using a two-concentration test design. The Order requires the test methods described in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (October 2002) (EPA-821-R-02-013), including review of the concentration-response pattern. USEPA withdrew its ATP approval for use of a two-concentration test design in lieu of the five concentration plus a control specified in the WET Test method, due to the currently pending proposed rulemaking to revise the ATP regulations at 40 CFR Part 136. The State permitting authority, here, the Regional Water Board, has the discretion to select the statistical approach for analyzing WET test data that is most appropriate for use in a particular permit. (See Section 9.4.1.2 of *Short-term Methods*, October 2002, EPA-821-R-02-013 ("[T]he statistical methods recommended in the manual are not the only possible methods of statistical analysis.")) The Regional Water Board has selected the TST statistical approach for use in this Order. Use of an alternate statistical calculation is contemplated in USEPA's 2002 the WET Test Method, which predates the 2010 TST document.	None necessary.
Camarillo SD	C-8	**The Regional Board has No Authority to Ignore SWRCB Precedent.**	Please see response to Comment C-1.	None necessary.
Camarillo SD	C-9	**No Approved Alternative Method for WET Exists or is Allowed.** The EPA's Part 136 methods are the only methods that may be used for determining compliance in NPDES permits. EPA regulations clearly state that "Monitoring must be conducted according to test procedures approved under 40 CFR Part 136." 40 C.F.R. §122.41(j)(4). EPA's promulgated Part 136 methods include a null	Please see response to Comment C-7 and C-10. The commenter notes that USEPA's 2010 publication regarding the TST statistical analysis is guidance and not regulation. Similarly, USEPA's published materials on the point-estimate technique and NOEC-LOEC hypothesis testing methods are guidance and not required statistical approaches. The 2002 Chronic Toxicity Testing Method clarifies that the "statistical methods recommended in this manual are not the only possible methods of statistical analysis … there are other reasonable and	None necessary.

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		hypothesis that water is presumed non-toxic until proven differently, has specified allowable statistical methods, and has two allowable endpoints (NOEC/LOEC, or EC25/IC25). The Part 136 methods do not authorize a null hypothesis presuming water to be "toxic," allowing a t-test based on the TST, or endpoints based on the TST. The approved 2002 Methods contain just four (4) approved specified statistical methods to be used with hypothesis tests: 1) Dunnett's Procedure; 2) T-test with the Bonferroni Adjustment; 3) Steel's Many-One Rank Test; and 4) Wilcoxon Rank Sum Test with the Bonferroni Adjustment. See accord USEPA, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Fourth Ed., Oct. 2002) ("2002 Methods") at pp. 44-45. Each of these statistical methods is used for hypothesis tests resulting in the endpoint estimates of NOEC or LOEC (No or Lowest Observable Effect Concentration). Id. at p. 43 (Figure 2 - Flowchart for statistical analysis of test data). However, the 2002 Methods express a promulgated preference for the alternative endpoint to the NOEC/LOEC, which is the point estimate approach (EC/IC25). The TST's "Pass/Fail" or "Greater than 50% Effect" are not approved endpoints and the TST is not an approved statistical method While the 2002 Methods and the proposed additions to the Permits' Fact Sheets recognize that "[t]he statistical methods recommended in this manual are not the only possible methods of statistical analysis," the Permits' amendments take this one statement out of context and ignore the remaining explanatory language stating that "[m]any other methods have been proposed and considered." EPA chose the specific statistical methods and hypothesis tests in that manual, which were incorporated by reference into Part 136, "because they are (1) applicable to most	defensible methods of statistical analysis for this kind of toxicity data." (Chronic WET Testing, October 2002, 9.4.1.2.) Contrary to the commenter's allegation, the Regional Water Board does not consider itself bound by USEPA's 2010 publication. The permitting authority has the discretion in this circumstance to select the means of statistical analysis that is most appropriate for the particular permit to be required for compliance and reporting purposes. (See 40 CFR §§ 122.44(d) and 122.43.).	

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		of the different toxicity test data sets for which they are recommended, (2) powerful statistical tests, (3) hopefully 'easily' understood by nonstatisticians, and (4) amenable to use without a computer, if necessary. 2002 Methods at p. 40, Section 9.4.1.2. The only way that TST could have been used was through a new rulemaking, or through an ATP, which was tried and has been withdrawn. EPA has acknowledged these limitations: "[A]s stated in the promulgated CWA WET methods and re-iterated in the 'EPA's National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document,' these <u>methods require a control plus five effluent concentrations under the methods' test acceptability criteria</u>. As such, <u>the promulgated methods do not allow for only two concentrations for use in NPDES permits</u>. Recognizing that modifications to promulgated methods that are outside the scope of the method's flexibility may be appropriate, 40 CFR Part 136 defines a process that allows for such modifications. Therefore, the appropriate venue to consider the modification you are requesting is the Alternate Test Procedure (ATP) program, as described in 40 CFR 136.4 and 40 CFR 136.5 which allows for both limited use ATPs and nationwide ATPs. As we have indicated to your staff, we do not yet have guidance for requesting or evaluating WET ATP requests as described in 40 CFR Part 136.4 and 136.5." Memo from Robert Wood, EPA HQ, to Alexis Strauss, EPA Region IX, SUBJECT: Response to "Approval to use 'two concentrations only' experimental design with EPA's Test of Significant Toxicity (TST) hypothesis testing approach (Oct. 22, 2013); *see also* email from Ross Brennan, EPA HQ, to David Smith, EPA Region IX (March 18, 2013)(stating that Region 9 mischaracterized the TST Guidance document and was seeking to endorse "a whole effluent toxicity		

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		(WET) test method approach that is not approved In EPA's promulgated WET test methods (40 CFR Part 136)." The email goes on to say that "A WET test method that uses only two concentrations does not meet the minimum mandatory [test acceptability criteria] TAC.").		
Camarillo SD	C-10	EPA Region IX and the Los Angeles Regional Water Board may prefer the TST, but the TST is not an approved Part 136 test method, endpoint, or statistical procedure. In fact, although EPA recently proposed amendments to the Part 136 methods a few months ago, including specific changes to the promulgated 2002 Methods and the ATP approval regulations, the TST was not included in this proposed rulemaking. See Federal Register Notice, http://www.gpo.gov/fdsys/pkg/FR-2015-02-19/pdf/2015-02841.pdf (February 19, 2015). If the TST was a truly superior method, the TST would have been included in these revised methods either in 2015 or in the last revisions in 2012. Yet, it was not, and the TST is not a valid Part 136 method and cannot be utilized as such. The TST cannot be used in NPDES permits based solely on outdated and unapproved 2010 EPA guidance documents that have never been adopted as rules. To do otherwise constitutes underground rulemaking, violating the Administrative Procedures Act and important public participation requirements.	Not just USEPA Region IX, but USEPA Headquarters in Washington D.C., endorsed the use of the TST in a memo dated, June 18, 2010 (Refer to Attachment A). The purpose of the memo was to transmit a copy of the final guidance document "National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA833-R-10-003)." The introduction refers to the TST as "an additional recommended statistical approach for analyzing WET test data used for whole effluent toxicity (WET) reasonable potential determinations and NPDES permit compliance." The memo goes on to state that the document was peer reviewed according to EPA's requirements and that the TST may be used for NPDES permit compliance. While it is true that in February of this year USEPA initiated the process to update 40 CFR part 136, the rulemaking process is still underway, and is by no means over. Comments on USEPA's proposed changes were due on May 20, 2015. USEPA has yet to respond to comments received or to issue a revised proposed rule based on the comments received. It is premature for the Permittee to judge what additional changes may or may not take place. However, we do know that the State Water Resources Control Board submitted a comment letter dated May 14, 2015 (Refer to Attachment B), requesting that USEPA modify a few sections of the WET Test Method to incorporate the TST statistical analysis. The use of the TST in the Camarillo WRP NPDES permit is allowed under the *Toxicity TMDL* implementation section which grants the Regional Water Board flexibility to determine the appropriate method to implement the WLAs based on USEPA, State Board, and Regional Board resolutions, "**guidance, and policy at the time of permit issuance** (emphasis added)." While the Regional Water Board agrees that one step to achieving	None necessary.

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			compliance with a water quality-based WET requirement can be a toxicity reduction evaluation to identify the constituents of concern, on its own, it is not enough to serve as the required NPDES WQBEL. The NPDES permit Orders adopted on May 8, 2014, require numeric chronic toxicity WQBELS and the TIE/TRE process if the numeric effluent limit is exceeded.	
Camarillo SD	C-11	**<u>The Proposed Amendments Ignore the 2002 Methods Requirements to Use and Analyze Multi-Concentration Tests and Consider the PMSD.</u>** The 2002 Methods intended for the use of a multi-concentration test design for chronic toxicity, with consideration of the resulting concentration-response pattern in assessing the validity of the test, along with a review of Percent Mean Significant Difference ("PMSD"). The amendments proposed to the Permits by the Regional Board do not allow these important validation steps and safeguards to be fully utilized. Thus, these Permit modifications conflict with the promulgated freshwater chronic toxicity test procedures in the 2002 Methods. The Part 136 approved methods for freshwater chronic toxicity in 40 C.F.R. section 136.3(a), Table 1A include Footnote 27, which mandates the use of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA-821-R-02-012*, Third Edition, October 2002 (EPA's "2002 Methods"). The 2002 Methods clearly require a multi-concentration test design with dose-response evaluation. Several examples are as follows (underlining added): "The tests recommended for use in determining discharge permit compliance in the NPDES program are <u>multi-concentration</u>, or definitive, tests <u>which provide (1) a point estimate of effluent toxicity in terms</u>	USEPA's position is that applying its 2000 concentration-response pattern review guidance and/or inapplicable NOEC/LOEC variability criteria (i.e., PMSDs) to the TST – an unrelated statistical approach – prior to reporting compliance will undercut the transparency of the reported toxicity result, shroud a potentially non-compliant result prior to reporting, and diminish the reliability and enforceability of the permit and its toxicity limits. Page F-48 of the Fact Sheet references audit correspondence from the State Water Board and USEPA. The preamble to the WET Test Method (Federal Register/ Vol. 67, No. 223, p. 69952 (November 19, 2002)) provides valuable insight into what USEPA intended when it was updating its WET Test Method. From the underlined language below, it is clear that the PMSD was only intended for permits that had limits in terms of NOEC or LOEC. "Variability Criteria Today's action incorporates mandatory variability criteria for five chronic test methods. USEPA recommends the use of point estimation techniques over hypothesis testing approaches for calculating endpoints for effluent toxicity tests under the NPDES Permitting Program. However, to reduce the within-test variability and to increase statistical sensitivity when test endpoints are expressed using hypothesis testing rather than the preferred point estimation techniques, variability criteria must be applied as a test review step when NPDES permits require sublethal hypothesis testing endpoints (i.e., no observed effect concentration (NOEC) or lowest observed effect concentration (LOEC) and the effluent has been determined to have no toxicity at the permitted receiving	None necessary.

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		of an IC25, IC50, or LC50, or (2) a no-observed-effect-concentration (NOEC) defined in terms of mortality, growth, reproduction, and/or teratogenicity and obtained by hypothesis testing" (2002 Methods, Section 8.10.1) "The concentration-response relationship generated for each multi-concentration test must be reviewed to ensure that calculated test results are interpreted appropriately" (2002 Methods, Section 10.2.6.2) "Tables 1, 3, and 4 (labeled as 3) - SUMMARY OF TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA WITH EFFLUENTS AND RECEIVING WATERS (TEST METHODS 1000.0, 1002.0, AND 1003.0): Test concentrations: Effluents: 5 and a control (required minimum) In addition, the 2002 Methods also make it clear that consideration of PMSD is a required element of the procedure by specifically stating: "When NPDES permits require sublethal hypothesis testing endpoints from Methods 1000.0, 1002.0, or 1003.0 (e.g., growth or reproduction NOECs and LOECs), within-test variability must be reviewed and variability criteria must be applied as described in this section." (2002 Methods, Section10.2.8.2)(emphasis added). For the purposes of evaluating within-test variability, the 2002 Methods consistently rely on use of the PMSD as a tool. A higher PMSD is equivalent to greater within-test variability while a lower PMSD indicates lower within-test variability. The 2002 Methods describe mandatory criteria using the PMSD for interpreting and validating sublethal hypothesis test results using the PMSD metric. *See* 2002 Methods at p. 51 (Section 10.2.8.2)("To measure test	water concentration. These variability criteria must be applied for the following methods: Fathead minnow Larval Survival and Growth Test: Selenastrum capricornutum Growth Test: Mysidopsis bahia Survival, Growth and Fecundity Test: and Inland Silverslide Larval Survival and Growth Test. Within test variability, measured as the percent minimum significant difference (PMSD), must be calculated and compared to upper bounds established for test PMSDs…" (p. 69957) It is reasonable and appropriate for the Regional Board to conclude that the PMSD tool for evaluating test variability is not applicable to this permit because it does not include chronic toxicity limits expressed as TUc or NOEC. While section 10.2.8.2 of the WET Test Method specifies that "When NPDES permits require sublethal hypothesis testing endpoints from Methods 1000.0, 1002.0, or 1003.0 (e.g., growth or reproduction NOECs and LOECs), within-test variability must be reviewed and variability criteria must be applied as described in this section (10.2.8.2)" (emphasis added), the WET Test Method section does not require the use of the PMSD. Subsection 10.2.8.2.1 describes how to calculate the PMSD and subsequent subsections describe how to compare the PMSD to see if the PMSD falls within an acceptable range; i.e. if PMSD is within the upper and lower bounds. Subsection 10.2.8.3 states: "To assist in reviewing within-test variability, EPA recommends maintaining control charts of PMSDs calculated for successive effluent tests (USEPA, 2000b). A control chart of PMSD values characterizes the range of variability observed within a given laboratory, and allows comparison of individual test PMSDs with the laboratory's typical range of variability. Control charts of other variability and test performance measures, such as the MSD, **standard deviation or CV of control responses, or average control response, also may be useful** for reviewing tests and minimizing variability. The log of PMSD will provide an approximately normal variate useful for control charting." (emphasis added)	

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		variability, calculate the percent minimum significant difference (PMSD) achieved in the test"). As quoted above, the 2002 Methods require review of the PMSD for any NPDES chronic toxicity hypothesis tests. The TST is a hypothesis test conducted on a chronic/ sublethal endpoint (albeit one unauthorized by the 2002 Methods), and if used, the TST must also be subjected to application of the PMSD criteria described in the 2002 Methods. The proposed amendments to the Permits specifically prohibit the use of the PMSD criteria and ignores the 2002 Method's mandated steps for quality assurance. *See* proposed changes to the Permit at Section III. J. ("The Percent Minimum Significant Difference (PMSD) criteria only apply to compliance reporting for the NOEC and the sublethal statistical endpoints of the NOEC, and therefore are not used to interpret TST results."). The proposed amendments to the Permits also propose to exclude evaluation of within-test variability (only reviewing "concentration-response patterns as appropriate.") These proposals are inconsistent and contradictory to specific requirements contained in the promulgated 2002 Methods. EPA could have proposed the limited use of concentration response and non-application of PMSD review in conjunction with the TST in its recent proposed rulemaking. EPA failed to do so. *See* U.*S. v. Riverside Bayview Homes* , 474 U.S. 121, 137 (U.S.S.C. 1985)(An action not to include modifications of which the entity was aware can be read as a presumption that the modifications were not intended to be included). Thus, the Regional Board has no authority to go beyond the requirements of the Part 136 methods to limit the evaluation of concentration-response relationship or ignore PMSDs, which are part of the approved 2002 Methods.	USEPA recommends use of PMSD when the hypothesis test has endpoints expressed in terms of growth or reproduction NOECs and LOECs. However, the Camarillo WRP permit does not have endpoints expressed as NOEC/LOC, but in terms of Pass or Fail and Percent Effect. In addition, under this permit, within-test variability of the WET test data utilized for the TST statistics will be reviewed and variability criteria will be applied by using control charts and coefficient of variation, as allowed by Subsection 10.2.8.3 of the WET Test Method. Therefore, the permit disallows the PMSD approach to evaluate variability of the WET test data because that approach is applicable to the NOEC/LOEC statistical analysis and not the TST statistics required by the permit. USEPA's Method Guidance addressing concentration-response evaluations, states that an "evaluation of the concentration-response relationship generated for each sample is an important part of the data review process that should not be overlooked." This guidance was promulgated in 2002, well before development of the TST statistical approach. The guidance assumes that either NOEC-LOEC hypothesis testing or a point estimation analysis will be used to evaluate multi-concentration WET test data. In that circumstance, evaluation of the concentration-response relationship is important to determine whether the assumptions underlying these statistical approaches are reflected in the data. As previously discussed, these same assumptions are not relied upon by the TST statistical approach. A WET test is validated by reviewing the test acceptability criteria and quality assurance/quality control (QA/QC) measures, such as: • Performing and evaluating reference toxicant tests. • Evaluating various test condition components, such as water quality measurements (temperature, pH, DO, light intensity, etc.) to ensure that they are within the typically accepted range. • Examining effluent sampling and handling. • Plotting control charts to track the lab's control performance and reference toxicant performance over time.	

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Camarillo SD	C-12	**The Modified Test Method Procedures Make Certification of "Valid" Results Impossible.** Because of the inherent uncertainties in chronic toxicity tests generally and the additional problems with the TST procedures as described in this letter, the Permittees will be unable to certify the validity or accuracy of TST results in their monthly Discharge Monitoring Reports (DMRs) despite new proposed language in the Permits' amendments discussing "valid" results. In March of 2000, U.S. EPA published guidance regarding the certification of WET test results on the DMR wherein EPA stated: "When a person certifies that the submission of WET testing information is accurate to the best of their knowledge and belief, the person certifies that the results obtained using the WET testing procedures are faithfully and truthfully transcribed on the information submission, and that the results were, in fact results that were obtained using the specified testing procedures." Since the TST method has not been approved as part of a Part 136 method, the Permittees cannot legally certify the results derived from this method or assert that these results are "valid." The fact that the TST procedure prescribed in the amendments relies on only two concentrations, rather than the minimum test concentrations mandated in the promulgated 2002 Methods to adequately review the dose-response, also makes it impossible to verify or certify the results. Finally, the Permittees cannot certify TST results as "true" or "accurate" where the conclusions are inconsistent with those reported using the IC25 or NOEC procedures and endpoints that EPA endorsed in the original rule promulgating the existing 2002 Methods. This is particularly true in light of the inability to confirm the validity of the dose response relationship. This position is also consistent with the	A valid test result refers to having the test results meet the Test Acceptability Requirements (TAC) specified in the WET Test Method and summarized in Table E-4 of the MRP, on page E-13. The revised language in section V.A.9 of the Monitoring and Reporting Program (MRP), page E-16, requires that the Permittee submit a full laboratory report including a "valid toxicity result." This standardized language was adopted into the San Jose Creek WRP NPDES permit during the April 2015 Board meeting and is included in the tentative Amended Order for Camarillo WRP. It aims to prevent future reporting deficiency problems that have been encountered in the past with other facilities, so that complete reports are submitted to the Regional Water Boards.	None necessary.

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		U.S. Court of Appeals finding in the Amoco case. For all of these reasons, the Regional Board should only prescribe permit requirements consistent with the 2002 Methods.		
Camarillo SD	C-13	**The Permittee requests that the Regional Water Board restores the chronic toxicity narrative effluent limitations and triggers from the last permit.**	Revision of the actual chronic toxicity limitation is outside the scope of this NPDES permit Amendment. Please see response to Comment C-1	None necessary.
Comments received from Heal the Bay June 8, 2015				
Heal the Bay	1	**Numeric Chronic Toxicity Effluent Limits Must be Included**	Thank you for your comment in support of this permit.	None necessary.
	2	**Additional Self-Monitoring Report Requirements Will Help the Regional Board Track and Assess Permittees Chronic Toxicity Testing**	Thank you for your comment in support of the reporting requirements.	None necessary.
	3	**Regional Board Should Approach Issuance of Time Schedule Orders for Chronic Toxicity Exceedances Cautiously** The Tentative Amendments would allow Permittees to submit a request for a time schedule order upon an exceedance of an effluent limitation for chronic toxicity. Although the Regional Board has included assessment criteria when determining if a time schedule order is appropriate (e.g. facility compliance with effluent limitations for chronic toxicity, magnitude and duration of exceedance, history of past TIE/TRE processes, efforts of Permittee to achieve compliance with effluent limitations for chronic toxicity), these criteria are extremely broad and lack clear guidance. The Tentative Amendments do not include information or guidance for determining the duration of time schedule orders. In addition, the Tentative Amendments do not address how chronic toxicity effluent limit exceedances occurring during time schedule orders, separate from the initial event, will be enforced; if these exceedances are included in time schedule orders, their inclusion would contradict	During the March 2015 Board meeting there was much discussion over a change sheet that offered language, proposed by the Discharger for the San Jose Creek WRP, that would have suspended enforcement action by the Board for chronic toxicity exceedances. The Board did not accept this proposal but instead directed staff to work with the Permittee and USEPA to consider alternative language and return to the Board in April 2015. The following language was considered by the Board during the April 2015 hearing and adopted into the San Jose Creek WRP NPDES permit. The same language is being incorporated into the NPDES permit for the Camarillo WRP facility, on page F-48 of the Fact Sheet, for consistency: The Permittee may submit a request for a time schedule order upon an exceedance of the effluent limitations for chronic toxicity in this Order. In determining whether a time schedule order is appropriate, and the conditions and duration of such an order, the Regional Water Board or Executive Officer will consider the following factors among other relevant considerations: the facility's history of compliance with effluent limitations for chronic toxicity, including the magnitude and duration of any	None necessary.

Commenter	#	Comment	Response	Action Taken
		previous Regional Board positions on chronic toxicity exceedance enforcement during TIE/TRE processes. The Regional Board has the discretion to enforce effluent limitation exceedances – it is unclear why the issuance of chronic toxicity time schedule orders are being considered at this time. We believe this is a slippery slope. Further, issuance of time schedule orders are resource intensive for Regional Board staff, time that may be better suited for other programs and projects. Because of these reasons, we believe the Regional Board should approach issuing time schedule orders for chronic toxicity effluent limitation exceedances cautiously as the criteria and requirements for crafting these enforcement actions are not clearly identified by the Regional Board at this time.	exceedances; history of and information acquired from past TIEs or TREs conducted for the facility; and the efforts of the Permittee to achieve compliance with effluent limitations for chronic toxicity. In addition to submitting a request for a TSO, the Permittee will need to provide adequate justification before the Executive Officer or the Regional Water Board would issue the TSO. Information submitted may include, but is not limited to, a proposed schedule with tasks for achieving compliance and milestone dates for completing such tasks. The duration of the TSO should be as short as practicable. However, if information is lacking, then the TSO would not be issued.	
Comments received from United States Environmental Protection Agency (USEPA) on June 4, 2015				
USEPA	1	USEPA strongly support adoption of the chronic toxicity requirements in this permit. USEPA is pleased that the draft permits plainly require effluent limits on chronic whole effluent toxicity (WET), where there is reasonable potential. USEPA agrees with the Regional Water Board's decision to use numeric chronic WET WQBELs for these POTW permits, which are feasible to calculate for the discharges. USEPA supports the inclusion of both monthly and daily WQBELs for chronic toxicity, as the Regional Water Board has determined that such limits are necessary to protect against highly toxic short-term peaks of acute or chronic toxicity that exceed the applicable toxicity water quality standard. USEPA commented that the draft permits are consistent with the nine POTW permits this Board has	Thank you for your comment in support of this permit.	None necessary.

Commenter	#	Comment	Response	Action Taken
		adopted over the past 12 months, which express both monthly and daily chronic toxicity WQBELs numerically. USEPA commented that it is critical that permitting authorities explicitly choose and identify the statistical approach that will be used to protect their narrative toxicity water quality standard and interpret toxicity test results required by NPDES permits. The Los Angeles Regional Water Board has chosen to measure chronic toxicity for compliance reporting with the Test od Significant Toxicity 9TST) bioequivalence statistical t-Test approach used to determine if two sets of observations - made for the effluent's instream concentration (IWC) and the control concentration - are different. The proposed modifications ensure that the subject permits, reissued over the past year, contain standardized transparent, clearly expressed, enforceable requirements for chronic WET. It is with that strong context that USEPA strongly supports the permit language updating Order section VII.J and associated fact sheet language, to result in consistency across all non-ocean POTW permits with chronic toxicity WQBELs expressed in terms of the TST. This provision specifies compliance evaluation and reporting requirements for chronic toxicity data expressed in terms of the TST and assures compliance with the multi-concentration test design requirement for NPDES effluents found in EPA's 2002 toxicity test methods. Also, it assures that - following EPA's 2002 toxicity test methods – the concentration-response pattern will be reviewed, as appropriate. On this point, USEPA notes that the National Organization of Clean Water Agencies (NACWA) has previously submitted comments critical of some of the POTW permits the Regional Water Board has recently issued. Bearing this in mind, we wish to draw your attention to a January 2006 white paper by NACWA, page 10, which states: "The [toxicity]		

Commenter	#	Comment	Response	Action Taken
		methods do not specifically state that a permittee may invalidate a [toxicity] test purely on the basis of the concentration-response relationship. However, NACWA believes that, in context of a full Data Quality Objectives program, the testing laboratory and the clean water agency should consider a test invalid if an adequate relationship is not present." This position places NACWA and its member agencies holding this position squarely at odds with EPA's 2002 toxicity test methods rule and pereamble regarding the proper role of concentration-response pattern reviews. After statistical analysis of the biological data, concentration-response pattern review specified by EPA plays a role limited to specific instructions for determining that particular endpoints - NOECs, LC50s, and IC25s - are interpreted appropriately. It remains EPA's position that the determination of toxicity is not based on achieving a specified concentration-response pattern. As a result, we concur with the proposed modifications to permit fact sheets, which correctly state that the appropriate interpretation of effluent (or receiving water) sample measurement results from the TST statistical approach is, by design, independent from the concentration-response patterns of the toxicity tests for those samples. When using the TST, we agree that the application of EPA's 2000 concentration-response pattern review guidance will not improve the appropriate interpretation of a TST result, as long as your permits require use of EPA's toxicity test methods by which good QA/QC is demonstrated through ongoing evaluation and tracking of reference toxicant testing and measures (i.e., mean, standard deviation, and coefficient of variation) of control concentration performance. Also, EPA commented that provision VII.J takes good steps to effectively address our concern that a laboratory's Standard Operating Procedures for		

Commenter	#	Comment	Response	Action Taken
		chronic toxicity test data analysis and review can be used to improperly disqualify a test result. It is EPA's position that applying EPA's 2000 concentration-response pattern review guidance and/or inapplicable NOEC/LOEC variability criteria (i.e., PMSDs) to the TST – an unrelated statistical approach – prior to reporting compliance will undercut the transparency of the reported toxicity result, shroud potentially non-compliance result prior to reporting, and diminish the reliability and enforceability of the permit and its toxicity limits. The three POTW permits adopted in April 2015 took a large step toward addressing EPA's ongoing observation that providing too much WET method flexibility on specific procedures has been a way for some NPDES permit holders to improperly disqualify test results. EPA supports the inclusion of the proposed generic permit condition and fact sheet language that takes steps to ensure such practices will not be used for the proposed modified permits.		

Attachment A

USEPA Washington D.C. Memo dated June 18, 2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 18 2010

OFFICE OF WATER

SUBJECT: Final National Pollutant Discharge Elimination System (NPDES) Test of Significant Toxicity (TST) Implementation Document

FROM: James Hanlon, Director
Office of Wastewater Management

TO: Water Division Directors, R1-10

The purpose of this memorandum is to transmit to you a copy of the final guidance document, "National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document" (EPA 833-R-10-003). This document provides an additional recommended statistical approach for analyzing WET test data used for whole effluent toxicity (WET) reasonable potential determinations and NPDES permit compliance.

EPA developed the TST approach to provide an additional scientifically valid, statistical application for assessing WET hypothesis test data. The TST assesses the measurement of toxic impacts from effluent on specific test organisms' ability to survive, grow, and reproduce and is based on research and peer-reviewed publications. The TST examines whether there is a biologically significant difference defined as the measured difference which has a detrimental effect on aquatic organisms to thrive and survive when compared against the normal condition (i.e., a control). Using a WET test, this biologically significant difference is the comparison between an effluent's in-stream waste concentration (IWC), as specified in the permit, and the control. The TST recommendations advance the applied science of the NPDES WET Program by addressing both the false negative and false positive error rates which have been a concern for both permitting authorities and permittees. We believe the TST approach addresses these false negative and positive concerns and provides an incentive to NPDES permittees to provide valid, high quality WET test data to enhance NPDES WET reasonable potential and permit compliance determinations.

The TST document was externally peer reviewed according to EPA's requirements and after addressing the peer review comments the document was sent out to EPA Regions and States for their review. Comments received from EPA Regions and States were addressed and, where appropriate, revisions were incorporated into the final document.

The TST approach does not preclude the use of existing recommendations for assessing WET data provided in EPA's 1991 Water Quality-based Technical Support Document (TSD) which remain valid for use by EPA Regions and the States.

To compliment your understanding of the attached final TST document, we have scheduled a second webcast on Wednesday, July 14, 2010, from 1:00 to 2:00 P.M. (EST). This webcast will provide an introduction to TST, including an overview of its scope and context; how the TST should be implemented; advantages of the TST over other statistical approaches; and conceptual examples demonstrating the TST application. Please watch for an E-mail with additional details about how to participate in the webcast. If you have questions, please contact Laura Phillips (phillips.laura@epa.gov, 202-564-0741) of my staff.

Attachment (1)

Cc: Mark Pollins, WED/OCE/OECA
Debra Denton, R9
Regional Branch Chiefs, R1-10
EPA WET Coordinators, R1-10

Attachment B

State Water Resources Control Board Letter on 40 CFR 136 WET Method dated May 14, 2015

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

May 14, 2015

Water Docket, Environmental Protection Agency
Attention: Docket ID # EPA-HQ-OW-2014-0797
Mail code: 4203M, 1200 Pennsylvania Ave. NW.
Washington, DC 20460

State Water Resources Control Board (State Water Board) staff would like to thank the United States Environmental Protection Agency (U.S. EPA) for the opportunity to comment on the "Clean Water Act Methods Update Rule for the Analysis of Effluent." This letter will focus exclusively on the proposed revisions to *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition,* and *Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition* (collectively: toxicity method manuals).

State Water Board staff supports the clarifying edits and updates proposed for the toxicity method manuals. In addition, State Water Board staff is requesting a revision to the five-concentration minimum required for all toxicity test methods in order to comport with the U.S. EPA's newest statistical approach, the Test of Significant Toxicity (TST), as it statistically compares only the instream waste concentration and a control.

The benefits of the TST approach have been lauded by numerous academicians. The five peer reviewers selected in a blind fashion for U.S. EPA's peer review process agreed that the TST's bioequivalence approach is sound, and that the results of TST analyses are reasonable and defensible. The State Water Board also initiated a peer review focusing on the use of the TST approach in the draft *Policy for Toxicity Assessment and Control.* The two researchers, Dr. Gerald A. Le Blanc and Dr. Michael C. Newman, concluded that the TST is a "...major advance from the currently compromised No Observed Effects Concentration (NOEC) approach," and "...is statistically sound, reduces burden associated with the assays, and, by structuring the assay around a hypothesis of significant toxicity, provides incentive for precision in assay performance." In addition, four individual articles examining the TST approach have been published in two respected, peer-reviewed toxicological journals (Denton et al. 2011, Diamond et al. 2011, Zheng et al. 2012, Diamond et al. 2013), while the State Water Board published a report comparatively analyzing the results of over 3,000 toxicity tests using both the TST and "traditional" hypothesis approaches (State Water Board, 2011). Although this "Test Drive" analysis showed that the results of the NOEC and TST are generally the same, it is important to note that the TST correctly identified truly non-toxic samples more often than the NOEC did. Moreover, the NOEC failed to identify more truly toxic samples than the TST approach.

The TST approach is currently being used to implement Tribal and Territory NPDES permits issued by U.S. EPA Region 9, as well as the U.S. EPA Region 9 offshore oil and gas general permit (No. CAG280000). The State Water Board has included provisions requiring the use of the TST approach in the Caltrans general permit for storm water discharges (Order No. 2012-0011-DWQ), the NPDES permit issued to the US Department of the Navy's San Diego Naval base (Order No. R9-2013-0064), the San Diego Regional Water Quality Control Board's general permit for discharges from boatyards and boat maintenance and repair facilities (Order No. R9-2013-0026), and the NPDES permit issued to the US Department of the Navy's San Diego Naval base (Order No. R9-2013-0064). The TST approach has also been incorporated into several NPDES permits in Hawaii.

It is worth noting that the toxicity method manuals clearly state that the statistical approaches featured therein are merely recommendations. As such, requiring the use of five concentrations for TST analyses is inherently contradictory. Therefore, State Water Board staff is suggesting the addition of the following language (in red) to the "Test Concentration" requirement in the toxicity method manuals' "Summary of Test Conditions" tables:

Effluents:	5 and a control (required minimum for LOEC and NOEC endpoints, and point estimates) 1 and a control (required minimum for TST)
Receiving Water:	100% receiving water (or minimum of 5) and a control (recommended)

In addition to the inclusion of the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* in the "Cited References" section, State Water Board staff believes it would also be helpful to update the sections of the toxicity method manuals that discuss "pass/fail" tests with the following language (in red):

> With the exception of the Test of Significant Toxicity (TST), Uuse of pass/fail tests consisting of a single effluent concentration (e.g., the receiving water concentration or RWC) and a control is not recommended. If the NPDES permit has a whole effluent toxicity limit for acute toxicity at the RWC, it is prudent to use that permit limit as the midpoint of a series of five effluent concentrations for the LOEC and NOEC endpoints, and for point estimates. This will ensure that there is sufficient information on the dose-response relationship. For example, the effluent concentrations utilized in a test may be: (1) 100% effluent, (2) (RWC + 100)/2, (3) RWC, (4) RWC/2, and (5) RWC/4. More specifically, if the RWC = 50%, appropriate effluent concentrations may be 100%, 75%, 50%, 25%, and 12.5%. Guidance for the TST approach is provided in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (USEPA 2010).

These minor revisions will eliminate the extremely wasteful practice of utilizing five test concentrations for TST analyses while greatly improving regulatory interpretation.

Sincerely,

Greg Gearheart, Director
Office of Information Management and Analysis

Rich Breuer, Assistant Deputy Director
Office of Information Management and Analysis

Rik Rasmussen, Chief
Total Maximum Daily Load Section

Zane Poulson, Chief
Inland Planning Standards and Implementation Unit

References:

Denton DL, Diamond JM, Zheng L. 2011. Test of Significant Toxicity: A Statistical Application for Assessing Whether an Effluent or Site Water is Truly Toxic. *Environmental Toxicology and Chemistry.* DOI: 10.1002/etc.493.
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Regional Water Quality Control Board, San Diego Region. 2013. General Waste Discharge Requirements for Discharges from Boatyards and Boat Maintenance and Repair Facilities Adjacent to Surface Waters within the San Diego Region. Order No. R9-2013-0026.
http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2013/R9-2013-0026.pdf

Regional Water Quality Control Board, San Diego Region. 2013. Waste Discharge Requirements for the United States Department of the Navy Naval Base, San Diego Complex, San Diego County. Order No. R9-2013-0064.
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http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/final_testdrive.pdf

State Water Resources Control Board. 2012a. Policy for Toxicity Assessment and Control, Public Review Draft.
http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/draft_tox_policy_0612.pdf

State Water Resources Control Board. 2012b. National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements (WDRS) for State of California Department of Transportation. Order No. 2012-0011-DWQ.
http://www.swrcb.ca.gov/board_decisions/adopted_orders/water_quality/2012/wqo2012_0011_dwq.pdf

State Water Resources Control Board peer review:

Gerald A. LeBlanc, PhD
http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/gerald_leblanc_review.pdf

Michael C. Newman, PhD
http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/michael_newman_review.pdf

U.S. Environmental Protection Agency. 2010. National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document. EPA 833-R-10-004.
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U.S. Environmental Protection Agency. 2012. Authorization to Discharge Under The National Pollutant Discharge Elimination System for Oil and Gas Exploration, Development, and Production Facilities. General Permit No. CAG280000.
http://www.epa.gov/region9/water/npdes/pdf/ocs-general-permit2012.pdf

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Zheng L, Diamond JM, Denton DL. 2012. Evaluation of whole effluent toxicity data characteristics and use of Welch's t-test in the Test of Significant Toxicity analysis.
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Attachment C

USEPA Region IX
ATP Withdrawal Letter dated February 11, 2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

February 11, 2015

Renee Spears
Senior Environmental Scientist Specialist-QA Officer
Office of Information Management & Analysis
State Water Resources Control Board
1001 I Street, 16-39D- Sacramento, CA 95814
P.O. Box 100- Sacramento, CA 95812

Dear Ms. Spears:

This letter addresses the EPA Region 9 Quality Assurance Office's March 17, 2014 approval of the State of California's request to use an Alternate Test Procedure (ATP), authorizing the use of two concentrations in lieu of the five concentrations plus a control specified in the WET test methods, when using the Test of Significant Toxicity (TST) statistical approach. EPA is withdrawing the approval of the Limited Use ATP, effective immediately, for a number of reasons. Please note that at this time, California's February 12, 2014 ATP request is no longer pending before EPA and should the State wish to pursue such an ATP, a new ATP application would be required.

As you may know, the March 17, 2014 Limited Use ATP approval was challenged in the U.S. Eastern District Court of California in June 2014 by the Southern California Alliance of Publicly Owned Treatment Works (SCAP) and Central Valley Clean Water Association (CVCWA). As a result of the litigation, EPA has become aware of issues related to the State of California's February 12, 2014 request as well as EPA Region 9's approval. First, we note that the State's request cited 40 C.F.R. § 136.4, which describes the process for *nationwide* ATP approvals, rather than 40 C.F.R. § 136.5 for a Limited Use ATP. While we continue to believe this was a simple error, we acknowledge that it has created uncertainty and confusion among the regulated community.

Second, there is currently pending a proposed rulemaking to revise the ATP regulations at 40 C.F.R. Part 136. Please see http://water.epa.gov/scitech/methods/cwa/mur2015.cfm. The EPA Administrator signed a proposed rule on February 5, 2015, relevant portions of which are attached. One element of that rulemaking is a proposal to correct an inadvertent error in the 40 C.F.R. § 136.5 regulatory language regarding Limited Use ATPs. In revising 40 C.F.R. § 136.5 in 2012, EPA had inadvertently included the phrase "or permitting authority" after each instance that the phrase "Regional Alternate Test Procedure Coordinator" or "Regional ATP Coordinator" appears in Section 136.5. The effect of this inadvertent inclusion was to authorize State

permitting authorities to approve ATPs. This was not EPA's intention, and EPA has now proposed to delete the phrase "or permitting authority" from Section 136.5. It is EPA's position that the inadvertent error is not implicated in its approval decision here, but plaintiffs have raised arguments regarding the phrase "permitting authority" in Section 136.5. To the extent this error has created uncertainty in regards to the appropriateness of the March 17, 2014 ATP approval, EPA believes it is appropriate to withdraw that approval. However, withdrawal of the approval does not affect any aspect of the regulations at 40 C.F.R. Part 136 but concerns only the State's February 12, 2014 ATP request.

Third, plaintiffs have raised concerns with respect to the administrative record for the ATP approval. In light of some of the issues raised by plaintiffs, EPA has concluded that it is appropriate to withdraw its ATP approval. If you have any questions regarding this action, please contact me at (415) 972-3411.

Sincerely,

Eugenia McNaughton

Eugenia McNaughton, Ph.D.
Manager, Quality Assurance Office

Cc: Rich Breuer

J. Clarifications/Corrections to ATP Procedures in 40 CFR 136.4, 136.5 and Allowed Modifications in 136.6

40 CFR 136.4 and 136.5 describe EPA procedures for obtaining approval to use an alternate test procedures either on a national basis, or for limited use by dischargers or facilities specified in the approval. In the 2012 Method Update Rule, EPA made several clarifying changes to the language of these sections. At the same time, however, in many places in 40 CFR 136.4 and 136.5 where the phrase "Regional Alternate Test Procedures Coordinator" or "Regional ATP Coordinator" appears, EPA inadvertently also inserted the phrase "or permitting authority" following the phrase. This error resulted from the use of the "search and replace" function on the computer. The effect of the change was to inadvertently authorize *State* permitting authorities to approve ATPs for limited use within the State. EPA never intended this result as is demonstrated by two facts. First, in its proposal for the 2012 Update, EPA did not propose to authorize State NPDES permitting authorities to approve limited use ATPs. Second, the rule states that the approval may be restricted to specific dischargers or facilities, or to all dischargers or facilities "specified in the approval *for the Region*." (emphasis added). This language evidences EPA's intent that the Region – not the state – would be authorized to issue any such limited use ATP approval. Finally, as further evidence of EPA's intent, in several places, the text of the rule makes more sense if read to authorize only the Regional ATP Coordinator, and not the State permitting authority, to approve limited use ATPs. For example, 40 CFR 136.5(d)(1) provides as follows:

> "After a review of the application by the Alternate Test Procedure Regional ATP Coordinator or permitting authority, the Regional ATP Coordinator or permitting

authority notifies the applicant and the appropriate State agency of approval or rejection of the use of the alternate test procedure...."

As currently written, if the State is acting on a request for approval, the regulation would require the State to inform itself of its own action in approving or rejecting the ATP, a somewhat superfluous requirement.

Consequently, EPA proposes to delete all instances of "or permitting authority" from 40 CFR 136.4 and 136.5 to correct this error and revise the rule text to its original intent. Based on this revision, EPA and EPA alone would have the authority to approve limited use ATPs.

EPA also proposes changes to 40 CFR 136.4 and 136.5 to clarify the process for nationwide approval and the Regional ATP Coordinator's role in limited use ATP approvals. These changes do not significantly change the process, the intent is to make wording simpler and clearer.

Finally, EPA proposes to add language to 40 CFR 136.6(b)(1) to clarify that if a method user is uncertain whether or not a modification is allowed under 40 CFR 136.6, the user should contact either its Director or EPA Regional ATP Coordinator.

K. Changes to Appendix B to 40 CFR part 136 - Definition and Procedure for the Determination of the MDL

EPA proposes revisions to the procedure for determination of the MDL primarily to address laboratory blank contamination and to better account for intra-laboratory variability. EPA's consideration of revisions to the MDL procedure for this rulemaking is specific to these revisions, and other changes to the procedure are outside the scope of this action. The proposed changes originated from The National Environmental Laboratory Accreditation Conference

5. Section 136.4 is amended by revising paragraphs (a) introductory text, (b), and (c) to read as follows:

§ 136.4 Application for and approval of alternate test procedures for nationwide use.

(a) A written application for review of an alternate test procedure (alternate method) for nationwide use may be made by letter via email or by hard copy in triplicate to the National Alternate Test Procedure (ATP) Program Coordinator (National Coordinator), Office of Science and Technology (4303T), Office of Water, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460. Any application for an ATP under this paragraph (a) shall:

* * * * *

(b) The National Coordinator may request additional information and analyses from the applicant in order to evaluate whether the alternate test procedure satisfies the applicable requirements of this part.

(c) Approval for nationwide use.

(1) After a review of the application and any additional analyses requested from the applicant, the National Coordinator will notify the applicant, in writing, of whether the National Coordinator will recommend approval or disapproval of the alternate test procedure for nationwide use in CWA programs. If the application is not recommended for approval, the National Coordinator may specify what additional information might lead to a reconsideration of the application and notify the Regional Alternate Test Procedure Coordinators of the disapproval recommendation. Based on the National Coordinator's recommended disapproval of a proposed alternate test procedure and an assessment of any current approvals for limited uses for the

unapproved method, the Regional ATP Coordinator may decide to withdraw approval of the method for limited use in the Region.

(2) Where the National Coordinator has recommended approval of an applicant's request for nationwide use of an alternate test procedure, the National Coordinator will notify the applicant. The National Coordinator will also notify the Regional ATP Coordinators that they may consider approval of this alternate test procedure for limited use in their Regions based on the information and data provided in the application until the alternate test procedure is approved by publication in a final rule in the Federal Register.

(3) EPA will propose to amend 40 CFR part 136 to include the alternate test procedure in §136.3. EPA shall make available for review all the factual bases for its proposal, including the method, any performance data submitted by the applicant and any available EPA analysis of those data.

(4) Following public comment, EPA shall publish in the FEDERAL REGISTER a final decision on whether to amend 40 CFR part 136 to include the alternate test procedure as an approved analytical method for nationwide use.

(5) Whenever the National Coordinator has recommended approval of an applicant's ATP request for nationwide use, any person may request an approval of the method for limited use under §136.5 from the EPA Region.

6. Section 136.5 is amended by revising paragraphs (a), (b), (c), and (d) to read as follows:

§136.5 Approval of alternate test procedures for limited use.

(a) Any person may request the Regional ATP Coordinator to approve the use of an alternate test procedure in the Region.

(b) When the request for the use of an alternate test procedure concerns use in a State with an NPDES permit program approved pursuant to section 402 of the Act, the requestor shall first submit an application for limited use to the Director of the State agency having responsibility for issuance of NPDES permits within such State (i.e., permitting authority). The Director will forward the application to the Regional ATP Coordinator with a recommendation for or against approval.

(c) Any application for approval of an alternate test procedure for limited use may be made by letter via email or by hard copy. The application shall include the following:

(1) Provide the name and address of the applicant and the applicable ID number of the existing or pending permit(s) and issuing agency for which use of the alternate test procedure is requested, and the discharge serial number.

* * * * *

(d) Approval for limited use. (1) The Regional ATP Coordinator will review the application and notify the applicant and the appropriate State agency of approval or rejection of the use of the alternate test procedure. The approval may be restricted to use only with respect to a specific discharge or facility (and its laboratory) or, at the discretion of the Regional ATP Coordinator, to all dischargers or facilities (and their associated laboratories) specified in the approval for the Region. If the application is not approved, the Regional ATP Coordinator shall specify what additional information might lead to a reconsideration of the application.

(2) The Regional ATP Coordinator will forward a copy of every approval and rejection notification to the National Alternate Test Procedure Coordinator.

7. In Section §136.6:

Clean Water Act Methods Update Rule for the Analysis of Effluent

List of Subjects in 40 CFR part 136

Environmental protection, Incorporation by reference, Reporting and recordkeeping requirements, Test procedures, Water pollution control.

Dated: FEB 05 2015

Gina McCarthy, Administrator.

Attachment D:

TMDL for Toxicity, Chlorpyrifos, and Diazinon in Calleguas Creek, its Tributaries, and Mugu Lagoon (Toxicity TMDL)

Attachment A to Resolution No. R4-2005-009

Amendment to the Water Quality Control Plan – Los Angeles Region

to Incorporate the

Total Maximum Daily Load for Toxicity, Chlorpyrifos, and Diazinon in the Calleguas Creek, its Tributaries and Mugu Lagoon

Adopted by the California Regional Water Quality Control Board, Los Angeles Region on 7 July, 2005.

Amendments

Table of Contents
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)

7- Calleguas Creek Watershed Toxicity TMDL

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Chapter 7. Total Maximum Daily Loads (TMDLs)
Calleguas Creek Watershed Toxicity TMDL

This TMDL was adopted by:

The Regional Water Quality Control Board on July 7, 2005.

This TMDL was approved by:

The State Water Resources Control Board on September 22, 2005.
The Office of Administrative Law on December 22, 2005.
The U.S. Environmental Protection Agency on March 14, 2006.

Table 7-16.1. Calleguas Creek Watershed Toxicity TMDL: Elements

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
Problem Statement	Discharge of wastes containing chlorpyrifos, diazinon, other pesticides and/or other toxicants to Calleguas Creek, its tributaries and Mugu Lagoon cause exceedances of water quality objectives for toxicity established in the Basin Plan. Elevated levels of chlorpyrifos have been found in fish tissue samples collected from a segment of Calleguas Creek. Chlorpyrifos and diazinon are organophosphate pesticides used in both agricultural and urban settings. Excessive chlorpyrifos and diazinon can cause aquatic life toxicity in inland surface and estuarine waters such as Calleguas Creek and Mugu Lagoon. The California 2002 303(d) list of impaired waterbodies includes listings for "water column toxicity," "sediment toxicity," chlorpyrifos in fish tissue," and "organophosphate pesticides in water" for various reaches of Calleguas Creek, its tributaries and Mugu Lagoon.
Numeric Targets	A water column toxicity target of 1.0 toxicity unit – chronic (1.0 TUc) is established to address toxicity in reaches where the toxicant has not been identified through a Toxicity Identification Evaluation (TIE) (unknown toxicity). TU_C = Toxicity Unit Chronic = 100/NOEC (no observable effects concentration) A sediment toxicity target was defined in the technical report for reaches where the sediment toxicant has not been identified through a TIE. The target is based on the definition of a toxic sediment sample as defined by the September 2004 Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List (SWRCB). Chlorpyrifos Numeric Targets (ug/L) Chronic (4 day average) / Acute (1 hour average) Freshwater 0.014 / 0.025 Saltwater (Mugu Lagoon) 0.009 / 0.02 Diazinon Numeric Targets (ug/L) Chronic (4 day average) / Acute (1 hour average) Freshwater 0.10 / 0.10 Saltwater (Mugu Lagoon) 0.40 / 0.82

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
	Additionally, the diazinon criteria selected as numeric targets are currently under review by the USEPA. If water quality objectives become available, the Regional Board may reconsider this TMDL and revise the water toxicity numeric target.
Source Analysis	Source analysis determined that agricultural and urban uses are the largest sources of chlorpyrifos and diazinon in the watershed. Urban use of diazinon and chlorpyrifos is unlikely to be a long-term source to the Calleguas Creek Watershed (CCW) as both of these pesticides have been banned for sale for non-agricultural uses on December 31, 2005 by federal regulation. As a result, the proportion of the loading from urban sources will likely decrease after December 2005. Chlorpyrifos – Sources by Use Dry Weather / Wet Weather Agriculture 66% / 80% Urban 23% / 20% POTW 11% / <1% Other <1% / <1% Diazinon – Sources by Use Dry Weather / Wet Weather Agriculture 30% / 1% Urban 13% / 62% POTW 57% / 37% Other <1% / <1%
Linkage Analysis	Water quality modeling established the linkage of sources of chlorpyrifos and diazinon in the CCW to observed water quality data. The linkage analysis qualitatively describes the connection between water column concentrations and sediment and fish tissue concentrations. The qualitative analysis demonstrates that the water column analysis conducted by laboratories implicitly includes sediment associated diazinon and chlorpyrifos loads transported to receiving waters as almost all water quality data do not differentiate between dissolved and particulate fractions. The linkage analysis assumes a reduction in water column concentrations will result in a reduction in fish tissue as chlorpyrifos in freshwater fish tissue rapidly depurate within several days of removal from exposure. Additionally, as chlorpyrifos preferentially binds to sediment the linkage analysis suggests that sediment concentrations of

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
	chlorpyrifos will need to decrease to achieve water quality numeric targets. The modeling approach reflects the uncertainty in current conditions and the potential impacts of watershed planning actions that may affect those conditions. A detailed description of the model is provided in an Attachment to the TMDL Technical Report.
Wasteload Allocations (WLA)	**Major point sources:** A wasteload of 1.0 TU_c is allocated to the major point sources (POTWs) discharging to the Calleguas Creek Watershed. Additionally, the following wasteloads for chlorpyrifos and diazinon are established and based on the numeric target for POTWs. The concentration based wasteload allocations for Camarillo and Camrosa WRPs for chlopyrifos is reduced by a 5% margin of safety from the numeric targets. This margin of safety is applied to the Calleguas Creek and Revelon subwatersheds based on uncertainty in the linkages between the water column criteria and fish tissue and sediment concentrations. **Chlorpyrifos WLAs, ug/L** POTW — Interim WLA: Chronic (4 day); Final WLA: Acute (1hour), Chronic (4 day) Hill Canyon WWTP: 0.030 / 0.025 / 0.014 Simi Valley WQCP: 0.030 / 0.025 / 0.014 Ventura County (Moorpark) WTP: 0.030 / 0.025 / 0.014 Camarillo WRP: 0.030 / 0.024 / 0.0133 Camrosa WRP: 0.030 / 0.024 / 0.0133 **Diazinon WLAs, ug/L** POTW — Interim Acute (1 hour); Interim Chronic (4 day); Final WLA (Acute or Chronic) Hill Canyon WWTP: 0.567 / 0.312 / 0.10 Simi Valley WQCP: 0.567 / 0.312 / 0.10 Ventura County (Morepark) WTP: 0.567 / 0.312 / 0.10 Camarillo WRP: 0.567 / 0.312 / 0.10 Camrosa WRP: 0.567 / 0.312 / 0.10 A wasteload of 1.0 TU_c is allocated to Urban Stormwater Co-Permittees (MS4) discharges to the Calleguas Creek Watershed. Additionally, the following wasteloads for chlorpyrifos and

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
	diazinon are established for MS4 discharges. **Chlorpyrifos WLAs, ug/L** Interim WLA (4 day) 0.45 — Final WLA (4 day) 0.014 **Diazinon WLAs, ug/L** Interim WLA Acute (1 hour) 1.73 — Interim WLA Chronic (4 day) 0.556 — Final WLA Acute and Chronic 0.10 **Minor point sources:** Minor sources include NPDES permittees other than POTWs, and Urban Stormwater Co-Permittees (MS4s) discharging to the Calleguas Creek Watershed. A wasteload of 1.0 TU_c is allocated to the minor point sources discharging to the Calleguas Creek Watershed. Additionally, the following wasteloads for chlorpyrifos and diazinon are established. **Chlorpyrifos WLAs, ug/L** Interim WLA Chronic (4 day) 0.45 — Final WLA Acute (1hour) 0.025 — Final WLA Chronic (4 day) 0.014 **Diazinon WLAs, ug/L** Interim WLA Acute (1 hour) 1.73 — Interim WLA Chronic (4 day) 0.556 — Final WLA Acute and Chronic 0.10
Load Allocations	**Non Point Source Dischargers:** A load of 1.0 TU_c is allocated to nonpoint sources discharging to the Calleguas Creek Watershed. Additionally, the following loads for chlorpyrifos and diazinon are established and based on the numeric targets. These loads apply to dischargers in accordance with the subwatershed into which the dischargers discharge. The concentration based load allocations for

<table>
<tr><th>TMDL Element</th><th>Calleguas Creek Watershed Toxicity TMDL</th></tr>
<tr><td></td><td>the Calleguas Creek and Revelon subwatersheds for chlopyrifos is reduced by a 5% margin of safety from the numeric targets. This margin of safety is based on uncertainty in the linkages between the water column criteria and fish tissue and sediment concentrations.

<u>Chlorpyrifos Load Allocations, ug/L</u>

<table>
<tr><th></th><th>Interim</th><th>Interim</th><th>Final</th><th></th></tr>
<tr><th>Subwatershed</th><th>Acute (1-hour)</th><th>Chronic (4-day)</th><th>Acute (1-hour)</th><th>Chronic (4-day)</th></tr>
<tr><td>Arroyo Simi</td><td>2.57</td><td>0.810</td><td>0.025</td><td>0.014</td></tr>
<tr><td>Las Posas</td><td>2.57</td><td>0.810</td><td>0.025</td><td>0.014</td></tr>
<tr><td>Conejo</td><td>2.57</td><td>0.810</td><td>0.025</td><td>0.014</td></tr>
<tr><td>Calleguas</td><td>2.57</td><td>0.810</td><td>0.024</td><td>0.0133</td></tr>
<tr><td>Revolon</td><td>2.57</td><td>0.810</td><td>0.024</td><td>0.0133</td></tr>
<tr><td>Mugu Lagoon</td><td>2.57</td><td>0.810</td><td>0.025</td><td>0.014</td></tr>
</table>

<u>Diazinon Load Allocations, ug/L</u>

<table>
<tr><th>Interim LA Acute (1 hour)</th><th>Interim LA Chronic (4 day)</th><th>Final LA Acute and Chronic</th></tr>
<tr><td>0.278</td><td>0.138</td><td>0.10</td></tr>
</table>
</td></tr>
<tr><td>Margin of Safety</td><td>In addition to the implicit margin of safety achieved by conservative assumptions and by using a concentration based TMDL, an explicit margin of safety of 5% has been added to the targets for chlorpyrifos in the Calleguas and Revolon subwatersheds and to the Camarillo and Camrosa WRPs to address uncertainty in the linkages between the water column criteria and fish tissue and sediment concentrations. The Calleguas and Revolon subwatersheds include those reaches listed for sediment toxicity and chlorpyrifos in fish tissue.</td></tr>
<tr><td>Future Growth</td><td>Ventura County accounts for slightly more than 2% of the state's residents with a population of 753,197 (US Census Bureau, 2000). GIS analysis of the 2000 census data yields a population estimate of 334,000 for the CCW, which equals about 44% of the county population. According to the Southern California Association of Governments (SCAG), growth in Ventura County averaged about 51% per decade from 1900-2000; with growth exceeding 70% in the 1920s, 1950s, and 1960s. The phase-out of chlorpyrifos and diazinon is expected to reduce loads from urban and POTWs significantly by 2007. Use of diazinon in agriculture has declined considerably between 1998 and 2003. Conversely, chlorpyrifos use in agriculture has remained relatively stable over the same period.</td></tr>
</table>

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
	The phase out of chlorpyrifos and diazinon as well as population growth will cause an increase in the use of replacement pesticides (e.g. pyrethroids) in the urban environment and may have an impact on water and/or sediment toxicity. Additionally, population growth may affect an increase in the levels of chlorpyrifos and diazinon loading in the CCW from imported products which contain residues of these pesticides.
Critical Conditions	The critical condition in this TMDL is defined as the flowrate at which the model calculated the greatest in-stream diazinon or chlorpyrifos concentration in comparison to the appropriate criterion. The critical condition for chlorpyrifos was in dry weather based on a chronic numeric target; the critical condition for diazinon was in wet weather based on an acute numeric target except in Mugu Lagoon where it was in dry weather based on the chronic numeric target.
Implementation Plan	WLAs established for the major points sources, including POTWs in the CCW will be implemented through NPDES permit effluent limits. The final WLAs will be included in NPDES permits in accordance with the compliance schedules provided. The Regional Board may revise these WLAs based on additional information as described in the Special Studies and Monitoring Section of the Technical Report. The toxicity WLAs will be implemented in accordance with US EPA, State Board and Regional Board resolutions, guidance and policy at the time of permit issuance or renewal. Currently, these WLAs would be implemented as a trigger for initiation of the TRE/TIE process as outlined in USEPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000) and current NPDES permits held by dischargers to the CCW. Stormwater WLAs will be incorporated into the NPDES permit as receiving water limits measured in-stream at the base of each subwatershed and will be achieved through the implementation of BMPs as outlined below. Evaluation of progress of the TMDL will be determined through the measurement of in-stream water quality and sediment at the base of each of the CCW subwatersheds. The Regional Board may revise these WLAs based on additional information developed through special studies and/or monitoring conducted as part of the TMDL.

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
	As shown in Table 7-16.2 the following implementation actions will be taken by the MS4s discharging to the CCW and POTWs located in the CCW: ▪ Plan, develop, and implement an urban pesticides public education program; ▪ Plan, develop, and implement urban pesticide education and chlorpyrifos and diazinon collection program; ▪ Study diazinon and chlorpyrifos replacement pesticides for use in the urban environment; and, ▪ Conduct environmental monitoring as outlined in the Monitoring Plan and NPDES Permits. LAs for chlorpyrifos and diazinon will be implemented through the State's Nonpoint Source Pollution Control Program (NPSPCP), nonpoint source pollution (i.e. Load Allocations). The LARWQCB is currently developing a Conditional Waiver for Irrigated Lands. Once adopted, the Conditional Waiver Program will implement allocations and attain numeric targets of this TMDL. Compliance with LAs will be measured at the monitoring sites approved by the Executive Officer of the Regional Board through the monitoring program developed as part of the Conditional Waiver, or through a monitoring program that is required by this TMDL. The toxicity LAs will be implemented in accordance with US EPA, State Board and Regional Board resolutions, guidance and policy at the time of permit or waiver issuance or renewal. The following implementation actions will be taken by agriculture dischargers located in the CCW: ▪ Enroll for coverage under a waiver of waste discharge requirements for irrigated lands; ▪ Implement monitoring required by this TMDL and the Conditional Waiver program; ▪ Complete studies to determine the most appropriate BMPs given crop type, pesticide, site specific conditions, as well as the critical condition defined in the development of the LAs; and, ▪ Implement appropriate BMPs and monitor to evaluate effectiveness on in-stream water and sediment quality. The Regional Board may revise this TMDL based on monitoring data and special studies of this TMDL. If the Regional Board revises NPDES permits or the Basin Plan to use other methods of evaluating toxicity or if other information supporting other methods

TMDL Element	Calleguas Creek Watershed Toxicity TMDL
	becomes available, the Regional Board may reconsider this TMDL and revise the water toxicity numeric target. Additionally, the development of sediment quality guidelines or criteria and other water quality criteria revisions may call for the reevaluation of the TMDL. The Implementation Plan includes this provision for reevaluating the TMDL to consider sediment quality guidelines or criteria and revised water quality objectives and the results of implementation studies, if appropriate.

Table 7-16.2. Overall Implementation Schedule for Calleguas Creek Watershed Toxicity TMDL

Implementation Action		Responsible Party	Date
1	Interim chlorpyrifos and diazinon waste-load allocations apply.[1]	POTW permittees and MS4 Copermittees	Effective date[2]
2	Interim chlorpyrifos and diazinon load allocations apply.[1]	Agricultural Dischargers	Effective date[2]
3	Finalize and submit workplan for integrated Calleguas Creek Watershed Monitoring Program for approval by the Regional Board Executive Officer.[3]	POTW permittees, MS4 Copermittees, and Agricultural Dischargers	6 months after effective date of amendment[2]
4	Initiate Calleguas Creek Watershed Toxicity TMDL Monitoring Program developed under Task 3 workplan.	POTW permittees, MS4 Copermittees, and Agricultural Dischargers	6 months after E.O. approval of Monitoring Program (task 3) workplan.
5	Conduct Special Study #1-Investigate the pesticides that will replace diazinon and chlorpyrifos in the urban environment, their potential impact on receiving waters, and potential control measures.	POTW permittees and MS4 Copermittees	2 years after effective date[2]
6	Conduct Special Study #2 – Consider results of monitoring of sediment concentrations by source/land use type through special study required in Special Study #1 of the OC Pesticides, PCBs and siltation TMDL Implementation Plan. If the special study is not completed through the OC Pesticides, PCBs and Siltation TMDL no consideration is necessary[3]	Agricultural Dischargers[3] and MS4 Copermittees	6 months after completion of CCW OC Pesticides, PCBs and Siltation TMDL sediment concentrations special study.[2]
7	Develop and implement collection program for diazinon and chlorpyrifos and an educational program. Collection and education could occur through existing programs such as household hazardous waste collection events	POTW permittees and MS4 Copermittees	3 years after effective date[2]
8	Develop an Agricultural Water Quality Management Plan in conjunction with the Conditional Waiver for Irrigated Lands, or (if the Conditional Waiver is not adopted in a timely manner) develop an Agricultural Water Quality Management Plan as part of the Calleguas Creek WMP.	Agricultural Dischargers[3]	3 years after effective date[2]
9	Identify the most appropriate BMPs given crop type, pesticide, site specific conditions, as well as the critical condition defined in the development of the LAs.	Agricultural Dischargers[3]	3 years after effective date[2]
10	Implement educational program on BMPs identified in the Agricultural Water Quality Management Plan.	Agricultural Dischargers	1 year after E.O. approval of Plan (Task 7)[2]
11	Conduct Special Study #3-Calculation of sediment transport rates in CCW. Consider findings of transport	Agricultural Dischargers[3] and	6 months after completion of CCW OC Pesticides,

[1] Interim WLAs and LAs are effective immediately upon TMDL adoption. WLAs will be placed in POTW NPDES permits as effluent limits. WLAs will be placed in stormwater NPDES permits as in-stream limits. LAs will be implemented using applicable regulatory mechanisms.

[2] Effective date of this TMDL.

[3] The Regional Board regulatory programs addressing all discharges in effect at the time an implementation task is due may contain requirements substantially similar to the requirements of an implementation task. If such a requirement is in place in another regulatory program including other TMDLs, the Executive Officer may determine that such other requirements satisfy the requirements of an implementation task of the TMDL and thereby coordinate this TMDL implementation plan with other regulatory programs.

Implementation Action		Responsible Party	Date
	rates developed through Special Study #1 of the OC Pesticides, PCBs and siltation TMDL Implementation Plan. If the special study is not completed through the OCs TMDL, no consideration is necessary.[3]	MS4 Copermittees	PCBa and Siltation TMDL sediment transport special study.[2]
12	Begin implementation of BMPs.	Agricultural Dischargers[3]	1 year after E.O. approval of Plan (Task 8)[2]
13	Evaluate effectiveness of BMPs.	Agricultural Dischargers[3]	3 years after E.O. approval of Plan (Task 8)[2]
14	Reevaluate the TMDLs, interim or final WLAs and LAs, and implementation schedule based on monitoring data and on the results of Implementation Actions 1-13 and if sediment guidelines are promulgated, or water quality criteria are revised, and/or if targets are achieved without attainment of WLAs or LAs.	Stakeholders and Regional Board	2 years after the submittal of information necessary to reevaluate the TMDL
15	Achievement of Final WLAs	POTW permittees and MS4 Copermittees	2 years after the effective date of the TMDL[2]
16	Achievement of Final LAs	Agricultural Dischargers	10 years after the effective date of the TMDL[2]